UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/530,513	08/22/2005	Ralf Dunkel	CS8479/LeA 36187	9581

34469 7590 12/29/2009

BAYER CROPSCIENCE LP
Patent Department
2 T .W. ALEXANDER DRIVE
RESEARCH TRIANGLE PARK, NC 27709

EXAMINER	
STOCKTON, LAURA LYNNE	
ART UNIT	PAPER NUMBER
1626	

NOTIFICATION DATE	DELIVERY MODE
12/29/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

blair.wilson@bayercropscience.com
pamula.ramsey@bayercropscience.com
rebecca.hayes@bayercropscience.com

Office Action Summary	Application No.	Applicant(s)	
	10/530,513	DUNKEL ET AL.	
	Examiner	Art Unit	
	Laura L. Stockton	1626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *October 1, 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *18-28 and 30-33* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *18-25,27,28 and 30-33* is/are rejected.

7)☒ Claim(s) *26* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claims 18-28 and 30-33 are pending in the application.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 1, 2009 has been entered.

Response to Amendment

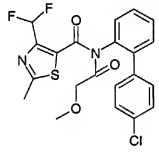
The Declaration under 37 CFR 1.132 filed

June 16, 2008 is sufficient to overcome the rejections of the claims based upon 35 USC §103 over Elbe et al. {CA 2,474,902}, taken alone, or in combination with Kanji et al. {JP 08/176112} and obviousness-type double patenting over application 10/502,994 (matured as U.S. Pat. 7,388,097).

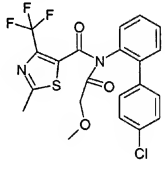
The Declaration under 37 CFR 1.132 filed February 23, 2007 (the first Declaration) has been re-evaluated because of the amendments to independent currently amended claim 18 filed October 1, 2009 wherein the definition of the variable R^6 has now been limited to represent $-COR^7$ or $-CONR^8R^9$. However, the Declaration under 37 CFR 1.132 filed February 23, 2007 is insufficient to overcome the rejection of claims 18-25, 27 and 30-33 based upon 35 USC §103 over Walter et al. {WO 02/059086}, taken alone, or in combination with Kanji et al. {JP 08/176112} as set forth in the last

Office action because the showing is not commensurate in scope with the instant claims since Applicant has compared only one of his compounds (Example 9 found on page 41 of the instant specification - reproduced below) to one compound of Walter et al. (Example 4.32 found on page 33 - reproduced below). *In re Greenfield*, 197 U.S.P.Q. 227 (1978) and *In re Lindner*, 173 U.S.P.Q. 356 (1972). Also see M.P.E.P. 716.02(d).

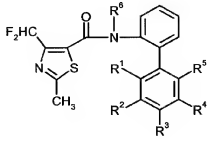
Example 9 of the instant invention



Example 4.32 of Walter et al.



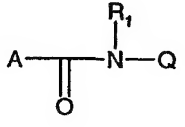
Applicant is claiming the compounds of formula (I)



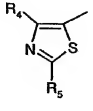
(I)

.

Although the definition of the instant **R**^{6} variable has now been limited to represent -COR^{7} or -CONR^{8}R^{9} per the amendment filed October 1, 2009, the instant **R**^{7} variable can represent a number of substituents, not only C_1-C_4-alkoxy-C_1-C_4-alkyl as found in instant Example 9, but also a C_1-C_8-alkyl and a C_1-C_8-alkoxy, which overlap with the teachings in Walter et al. Walter et al. teach compounds of formula I as follows:

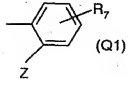


I



(A3)

wherein **A** can represent ; **R**$_5$ can represent methyl; **R**$_4$ can represent CF_2H; **Q** can represent



; **R**$_7$ can represent hydrogen; and **Z** can

represent phenyl or halophenyl. Walter et al. teach that their $\mathbf{R_1}$ variable (which corresponds to the position of the instant $\mathbf{R^6}$ variable) can represent COR_3 in which their $\mathbf{R_3}$ variable (which corresponds to the position of the instant $\mathbf{R^7}$ variable) can represent C_1-C_6-alkyl, C_1-C_6-alkoxy and C_1-C_6-alkyl substituted with C_1-C_6-alkoxy. Walter et al. disclose species having wherein their $\mathbf{R_1}$ represents:

-COC_1-C_6-alkyl (see Compounds 4.19, 4.20, 4.26, 4.27 and 4.28 on page 32 of Walter et al. and Examples 1 and 8 of the instant claimed invention);

-COC_1-C_6-alkoxy (see Compounds 4.42, 4.43 and 4.44 on page 33 of Walter et al.); and

-COC_1-C_6-alkoxy-C_1-C_6-alkyl (see Compounds 4.31, 4.32, 4.38 and 4.39 on page 33 of Walter et al. and Example 9 of the instant claimed invention).

Therefore, the showing of unexpected results is insufficient since the showing is not commensurate in scope with the instant claimed invention.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 18-25, 27, 28 and 30-33 are provisionally rejected on the ground of nonstatutory obviousness-type

double patenting as being unpatentable over claims 1-4 and 6-8 of copending Application No. 11/661,092; and over claims 1-4 and 6-8 of copending Application No. 11/661,100. Although the conflicting claims are not identical, they are not patentably distinct from each other because the difference between the instant claimed invention and the invention claimed in the copending applications is that of a hydrogen (instant claims) versus alkyl (copending applications wherein R^4 is alkyl).

It is well established that the substitution of a lower alkyl for a hydrogen atom on a known compound is not a patentable modification absent unexpected or unobvious results. *In re Lincoln*, 53 U.S.P.Q. 40 (C.C.P.A. 1942), *In re Druey*, 138 USPQ 39 (C.C.P.A. 1963), *In re Wood*, 199 U.S.P.Q. 137 (C.C.P.A. 1978) and *In re Lohr*, 137 U.S.P.Q. 548, 549 (C.C.P.A. 1963). The motivation to make the claimed compounds derives from the expectation that structurally similar compounds

would possess similar activity (i.e., combating undesired microorganisms).

One skilled in the art would thus be motivated to prepare compounds in the homology series of the copending applications to arrive at the instant claimed compounds with the expectation of obtaining additional beneficial compounds that would be useful for combating undesired microorganisms. The instant claimed compounds would have been suggested to one skilled in the art and therefore, the instant claimed compounds would have been obvious to one skilled in the art.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

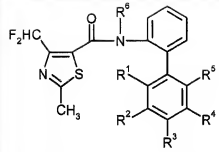
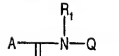
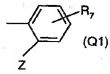
> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 18-25, 27 and 30-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walter et al. {WO 02/059086}, taken alone, or in combination with Kanji et al. {JP 08/176112}. A translation of the JP document was provided with a previous Office Action and will be referred to hereinafter.

Determination of the scope and content of the prior art (MPEP §2141.01)

Applicant claims thiazole compounds. **Walter et al.** teach thiazole compounds which are structurally similar to the instant claimed compounds. See the entire disclosure of Walter et al., particularly pages 1, 2

and 8-16; and especially Compound Nos. 4.19, 4.20, 4.26, 4.27 and 4.28 (page 32), Compound Nos. 4.31, 4.32, 4.38, 4.39, 4.43 and 4.44 (page 33); Compound No. 7.03 (page 39); and Compound Nos. 7.08, 7.15, 7.18 and 7.20 (page 40). Also see, for instance, the table below.

Applicant's compounds of formula (I)	**Walter et al.'s Compounds of formula (I)**
 (I) **R^1**, **R^2**, **R^3**, **R^4** and **R^5** can independently represent hydrogen or halogen	 I wherein **A** can  (A3) represent ; **R_5** can represent methyl; **R_4** can represent CF_2H; **Q** can represent  (Q1) ; **R_7** can represent hydrogen; and **Z** can represent phenyl or halophenyl

R^6 can represent $-COR^7$ wherein **R^7** is C_1-C_8-alkyl (Example 1 on page 39 and Example 8 on page 41); or	**R_1** can represent COR_3 wherein **R_3** is C_1-C_6-alkyl (Compounds 4.19, 4.20, 4.26, 4.27 and 4.28 on page 32); or
R^6 can represent $-COR^7$ wherein **R^7** is C_1-C_8-alkoxy; or	**R_1** can represent COR_3 wherein **R_3** is C_1-C_6-alkoxy (Compounds 4.42, 4.43 and 4.44 on page 33); or
R^6 can represent $-COR^7$ wherein **R^7** is C_1-C_4-alkoxy-C_1-C_4-alkyl (Example 9 on page 41)	**R_1** can represent COR_3 wherein **R_3** is C_1-C_6-alkyl substituted by C_1-C_6-alkoxy (Compounds 4.31, 4.32, 4.38 and 4.39 on page 33)

Ascertainment of the difference between the prior art and the claims (MPEP §2141.02)

The difference between the compounds of Walter et al. and the compounds instantly claimed is that the instant claimed compounds are generically described in Walter et al.

Further, **Kanji et al.** teach the interchangeability of the various substituents attached to the nitrogen of the carboxanilide group (see the definition of R1 in Kanji et al. in paragraph [0009]) in thiazole compounds that are useful as microbicidal agents.

Finding of prima facie obviousness--rational and motivation (MPEP §2142-2413)

The indiscriminate selection of "some" among "many" is *prima facie* obvious, *In re Lemin*, 141 USPQ 814 (1964). The motivation to make the claimed compounds derives from the expectation that structurally similar compounds would possess similar activity (e.g., controlling undesired microorganisms).

One skilled in the art would thus be motivated to prepare products embraced by Walter et al., especially in view of the teachings in Kanji et al., to arrive at the instant claimed products with the expectation of obtaining additional beneficial products which would be useful for controlling undesired microorganisms. The instant claimed invention would have been suggested to one skilled in the art and therefore, the instant claimed invention would have been obvious to one skilled in the art.

Response to Arguments

Applicant's arguments filed October 1, 2009 have been fully considered. Applicant states that since the thiazolecarboxamides specifically disclosed in Walter et al. (found on pages 31-33) all have only CF_3 groups on thiazole ring (the R_4 variable in Walter et al.), one might reasonably conclude that the reference considers CF_3 to be the preferred member of the R_4 variable.

In response, it is well established that consideration of a reference is not limited to the preferred embodiments or working examples, but extends to the entire disclosure for what it fairly teaches, when viewed in light of the admitted knowledge in the art, to person of ordinary skill in the art. *In re Boe*, 148 USPQ 507, 510 (CCPA 1966). Although, Walter et al. do prepare species in which the R_4 variable represents CF_2H. See, for instance, Compounds 2.016-2.020 on page 22; Compounds 2.021, 2.022, 2.043 and 2.044 on page 23; Compounds 2.045-2.048 on page 24;

Compounds 2.070-2.073 on page 25; Compounds 7.08, 7.10, 7.12, 7.15, 7.18 and 7.20 on page 40; etc. Admittedly, these compounds in which the R_4 variable represents CF_2H do not have the A variable of Walter et al. representing the thiazole ring of (A3). Although, if that were the case, the instant claimed invention would have been rejected under 35 USC 102(b) also. It would appear that Applicant is arguing that if a rejection under 35 USC § 102 can not be made, than a rejection under 35 USC § 103 should not be made. However, this is not one of the factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a).

Applicant argues that: (1) Walter et al. do not describe the particular combination of structural features; (2) hindsight reconstruction has been applied; (3) the instant claimed compounds have unexpected results as seen in the first Declaration

under 37 CFR 1.132 filed February 23, 2007 and the purpose of the comparison showing in the first Declaration under 37 CFR 1.132 filed February 23, 2007 was to show the significance of the difluoromethyl substituent on the thiazole ring, not the effect of various amide substituents; and (4) Kanji et al. do not suggest that the thiazole moiety can bear a haloalkyl substituent other than CF_3.

Applicant's arguments have been considered but have not been found persuasive. Applicant argues that Walter et al. do not describe the particular combination of structural features. In response, it is disagreed that Walter et al. do not describe the instant claimed compounds. See, for example, the table found above.

In response to Applicant's argument that the Examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense

necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Applicant argues that the instant claimed compounds have unexpected results as seen in the first Declaration under 37 CFR 1.132 filed February 23, 2007. In response, the first Declaration under 37 CFR 1.132 filed February 23, 2007 has been found insufficient for reasons stated above.

Applicant argues that Kanji et al. do not suggest that the thiazole moiety can bear a haloalkyl substituent other than CF_3. In response, Kanji et al. is a secondary reference and as such, is not required to teach every aspect of the claimed invention. The Kanji et al. reference was relied on for its teaching

of the substituents defined by the R_1 variable, and not the possible substituents on the thiazole ring. The test for combining references is not what individual references themselves suggest but rather what the combination of disclosures taken as a whole would suggest to one of ordinary skill in the art. *In re McLaughlin*, 170 USPQ 209 (1971). While a deficiency in a reference may overcome a rejection under 35 U.S.C. § 103, a reference is not overcome by pointing out that a reference lacks a teaching for which other references are relied. *In re Lyons*, 150 U.S.P.Q. 741, 746 (C.C.P.A. 1966). Additionally, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicant argues that he fails to see the need to compare additional compounds having different acyl

groups on the amide bridge (the position of the instant R^6 variable). In response, and as stated above, a showing of unexpected results must be commensurate in scope with the instant claimed invention in order for the showing to be sufficient to overcome a rejection under 35 USC 103. The instant claimed R^6 variable represents a several different substituents {i.e., -COC_1-C_4-alkoxy-C_1-C_4-alkyl, -COC_1-C_8-alkyl and -COC_1-C_8-alkoxy}, which substituents overlap with the teachings in Walter et al. as discussed above. Absent a persuasive side-by-side factual showing of unexpected, unobvious and beneficial results of the instant claimed compounds over the closest prior art compounds, commensurate in scope therewith, the instant claimed compounds would have been suggested to one of ordinary skill in the art and therefore, the instant claimed compounds would have been obvious to one of ordinary skill in the art. The rejection is deemed

proper and therefore, maintained for all the reasons of record in previous Office Actions.

Allowable Subject Matter

Claim 26 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura L. Stockton whose telephone number is (571) 272-0710. The examiner can normally be reached on Monday-Friday from 6:15 am to 2:45 pm. If the examiner is out of the Office, the examiner's supervisor, Joseph McKane, can be reached on (571) 272-0699.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for

unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

The Official fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

/Laura L. Stockton/
Laura L. Stockton
Patent Examiner
Art Unit 1626, Group 1620
Technology Center 1600

December 25, 2009